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Lake H, Barrett, Acting Director
Office of Civilian Radioactive Waste Management
Yucca Mountain Site Characterization Office
P.O. Box 30307
North Las Vegas, NV 89036-0307

Dear Mr. Barrett:

I am writing in response to your letter of August 28, 2001, regarding the development of Yucca Mountain as a repository for spent nuclear fuel and high level radioactive waste.

I worked in the field of energy studies for approximately 20 years before retiring from Exxon Co., USA. Energy sources considered in these studies included petroleum, coal, nuclear, oil shale, and solar. Prior to that I worked at the Exxon Refinery at Baytown, TX.. where many new technologies were put into operation during World War II; corrective measures were developed and applied as the need arose.

It appears to me there has been a progression of energy sources from physical sources, primarily muscle, wind, and water power; to chemical sources, primarily the combustion of wood, coal, and petroleum products; and finally to nuclear sources, primarily fission of uranium, plutonium, and thorium.

The growth of U. S. and world population and the increasing standard of living in much of the world, points to a much greater use of nuclear fission in the future.

Based on the above background, I believe that a repository for spent nuclear fuel and radioactive waste is needed. Even though in the longer term reprocessing and almost complete consumption of uranium, plutonium, and thorium may be achieved, storage would still be needed for the radioactive fragments from the fission reactions. Additional incentive for a centralized storage site such as Yucca Mountain is the greater safety provided compared to present localized, surface storage sites at nuclear power plants and weapons plants.

Given the preceeding general views I offer the following comments on the specific points listed in your letter under "Suggested Topics for Public Comment on Yucca Mountain". My comments are in the same order as the points in your "Suggested Topics".

- o I believe that an adequate investigation has been made and documented for the use of the Yucca Mountain site.

I also believe it is not possible to foresee all the problems which might arise. However, with retrievable, monitored

storage it should be possible to develop and apply adequate corrective steps as the need arises.

- o I believe the Secretary should proceed to recommend the site to the President at this time.
- o I know of no reason that should prevent the President from concluding that the Yucca Mountain site is qualified for the preparation and submission of a construction license application.
- o I believe the Secretary should proceed with a recommendation to the President.
- o Again, I believe the Secretary should proceed with a recommendation to the President. I do not know of any alternative measures that can be taken for assuring safe disposal of spent nuclear fuel and high radioactive waste.
- o I have these additional comments to make:
 - I believe there are conflicting political, ecological, public health, and economic views on the suitability of the Yucca Mountain site. This probably would be true of any site investigated.
 - It appears to me that the transition from dispersed surface storage to centralized storage such as Yucca Mountain, would be eased by the authorization of a demonstration program in which a few tons of spent fuel and radioactive waste are transported to a retrievable, monitored repository at Yucca Mountain.

A small scale demonstration such as this would allow inspection of the various steps involved in the preparation, transportation, and storage of radioactive materials. Corrective measures would be developed and applied as needed.

The small scale demonstration operation would then be expanded gradually to full-scale operation.

I hope that these comments will be useful to you.

Sincerely,

Nick P. Peet

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